

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,571	10/31/2003	William P. Fornof	28679/04275 (02-004 US)	1136
24024	7590 08/11/2005		EXAMINER	
CALFEE HA	LTER & GRISWOL	PHAM, MINH CHAU THI		
800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

•			— <i></i>			
	Application No.	Applicant(s)				
	10/698,571	FORNOF ET AL.				
Office Action Summary	Examiner	Art Unit				
	Minh-Chau T. Pham	1724				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		. *				
1) Responsive to communication(s) filed on	•					
2a) ☐ This action is FINAL . 2b) ☒ This	action is non-final.					
,						
Disposition of Claims						
4) ☐ Claim(s) 1-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-33 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	- ', '					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/7/05 & 4/16/04. 	Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152	?)			

Claim Objections

Claim 17 is objected to because of the following informalities: Claim 17 depends on "claim 19" which is incorrect. Claim 17 should depend on any other previous claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, 16-25, 27 and 29-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima (4,892,569).

Kojima teaches an oil separator (107) for use in a vehicle air system (col. 1, lines 6-8) comprising a fixture (10) for mounting the oil separator to a vehicle, an oil separator cartridge (57) connected with the fixture (10) for coalescing oil in air supplied to the oil separator and the fixture (10) including an inlet (84) port for allowing air from a compressor into the fixture and a delivery port (86) for allowing air to exit the oil separator after being cleaned and the fixture including a plurality of ports extending from the inlet port for directing air from the inlet port into the cartridge and the plurality of ports having a combined flow area equal to the flow area of the inlet port, a recycling valve (109) for removing coalesced oil from the oil separator (107), a sump (107) mounted adjacent to the cartridge (57) for collecting the coalesced oil, a recycling valve (110) being connected to the sump (107) and including an inlet port for draining oil from

Art Unit: 1724

the sump, and outlet port for removing oil from the valve, and the valve including a piston (68) in a cylinder in response to a control air pressure, and a pressure relief valve in fluid communication with the oil separator cartridge for releasing air from the oil separator in response to air pressure reaching a predetermined amount (col. 7, lines 13-41). Kojima also teaches a method comprising the steps of directing compressed air into a cartridge (57) of an oil separator (107) to coalesce oil in the compressed air, collecting oil in a sump attached to the oil separator, opening a recycling valve (109) attached to the sump to enable the coalesced oil to flow out the sump.

Page 3

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 10/698,571

Art Unit: 1724

4704

Claims 13-15, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (4,892,569), in view of McCombs (5,871,564).

Claims 13-15, 26 and 28 call for the pressure relief valve having an audible sound. McCombs discloses a pressure relief valve (112) for a compressor assembly (24) having an indicator either audio or visual or even both (see col. 6, line 60 through col. 7, line 4). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a pressure relief valve with an audible signal as taught by McCombs in the oil separator of Kojima since the audible sound would signal the air pressure of the air supplied or released reach a predetermined pressure limit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/698,571 Page 5

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh-Chau Pham Patent Examiner

Art Unit: 1724 August 4, 2005